

**WHAT IS CLAIMED IS:**

- 50B B17
1. A method of generically defining attributes of a serial number format, the method comprising defining a serial number mask that characterizes the serial number format, and providing the serial number mask with at least a first character that describes variables of the serial number format.
  2. A method according to claim 1, further comprising providing the serial number mask with a second character that describes a check digit of the serial number format.
  3. A method according to claim 2, further comprising providing the serial number mask with a third character that describes constants of the serial number format.
  4. A method according to claim 2, further comprising attaching a check digit algorithm to the serial number mask, wherein the check digit algorithm defines a manner of calculating the check digit of a particular serial number.
  5. A method according to claim 4, further comprising defining the check digit algorithm with six arguments, including starting position, ending position, direction, multiplier, multiplier position, and multiplier reduction.

6. A method according to claim 1, wherein the step of providing the serial number mask with at least a first character comprises providing the serial number mask with a plurality of the first characters corresponding to a number of variable digits in the serial number format.

7. A method according to claim 6, further comprising providing the serial number mask with a fourth character that describes a special constant identifier.

8. A method according to claim 7, wherein the special constant identifier is one of a UPC code for a product, a model number for the product, and a vendor specific code for the product, and wherein the fourth character is different for each different special constant identifier.

9. An information processing system having a product registration database containing information on purchased products and return criteria for purchased products, the information processing system storing said information by product serial number according to a serial number mask that characterizes a format of the serial number, wherein the serial number mask includes at least a first character that describes variables of the serial number format.

10. An information processing system according to claim 9, wherein the serial number format for each purchased product comprises an associated serial number mask.

11. An information processing system according to claim 9, wherein the serial number mask further comprises a second character that describes a check digit of the serial number format.

12. An information processing system according to claim 11, wherein the serial number mask further comprises a third character that describes constants of the serial number format.

13. An information processing system according to claim 9, wherein the serial number mask comprises a plurality of the first characters corresponding to a number of variable digits in the serial number format.

14. A serial number mask defined according to the method of claim 1.

15. A method of reducing improper returns of consumer products, the method comprising:

receiving serial number formats of the consumer products;

defining serial number masks that characterize the serial number formats, respectively;

providing the serial number masks with at least a first character that describes variables of the serial number format; and

storing a product registration program that effects storing and maintenance of a product registration database at a time of product purchase in accordance with the serial number masks.

16. A method according to claim 15, further comprising providing the serial number mask with a second character that describes a check digit of the serial number format.

17. A method according to claim 16, further comprising providing the serial number mask with a third character that describes constants of the serial number format.

18. A method according to claim 16, further comprising attaching a check digit algorithm to the serial number mask, wherein the check digit algorithm defines a manner of calculating the check digit of a particular serial number.

19. A method according to claim 18, further comprising defining the check digit algorithm with six arguments, including starting position, ending position, direction, multiplier, multiplier position, and multiplier reduction.

20. A method according to claim 15, wherein the step of providing the serial number mask with at least a first character comprises providing the serial number mask with a plurality of the first characters corresponding to a number of variable digits in the serial number format.

21. A method according to claim 20, further comprising providing the serial number mask with a fourth character that describes a special constant identifier.

22. A method according to claim 21, wherein the special constant identifier is one of a UPC code for a product, a model number for the product, and a vendor specific code for the product, and wherein the fourth character is different for each different special constant identifier.